

ABSTRACT OF THE DISCLOSURE

A drive circuit includes a drive transistor connected at a pair of its main electrodes respectively to a drive output terminal side and a reference voltage source VEE side, an operational amplifier for controlling an output voltage that is output from the drive transistor, a detection transistor for detecting a current that flows through the drive transistor, a first feedback loop for detecting an output voltage at the drive output terminal and feeding back the output voltage to the operational amplifier, and a second feedback loop for detecting an output current of the detection transistor and feeding back the output current to the operational amplifier. The drive transistor and the detection transistor form a mirror circuit.